

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1584347

Luminaire Tested: 14CZSP-49HE-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1584347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2602-698-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 14CZSP-49HE-L940
Description: 1x4 CZSP LED Luminaire, 4000K CCT and 4500 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

Summary

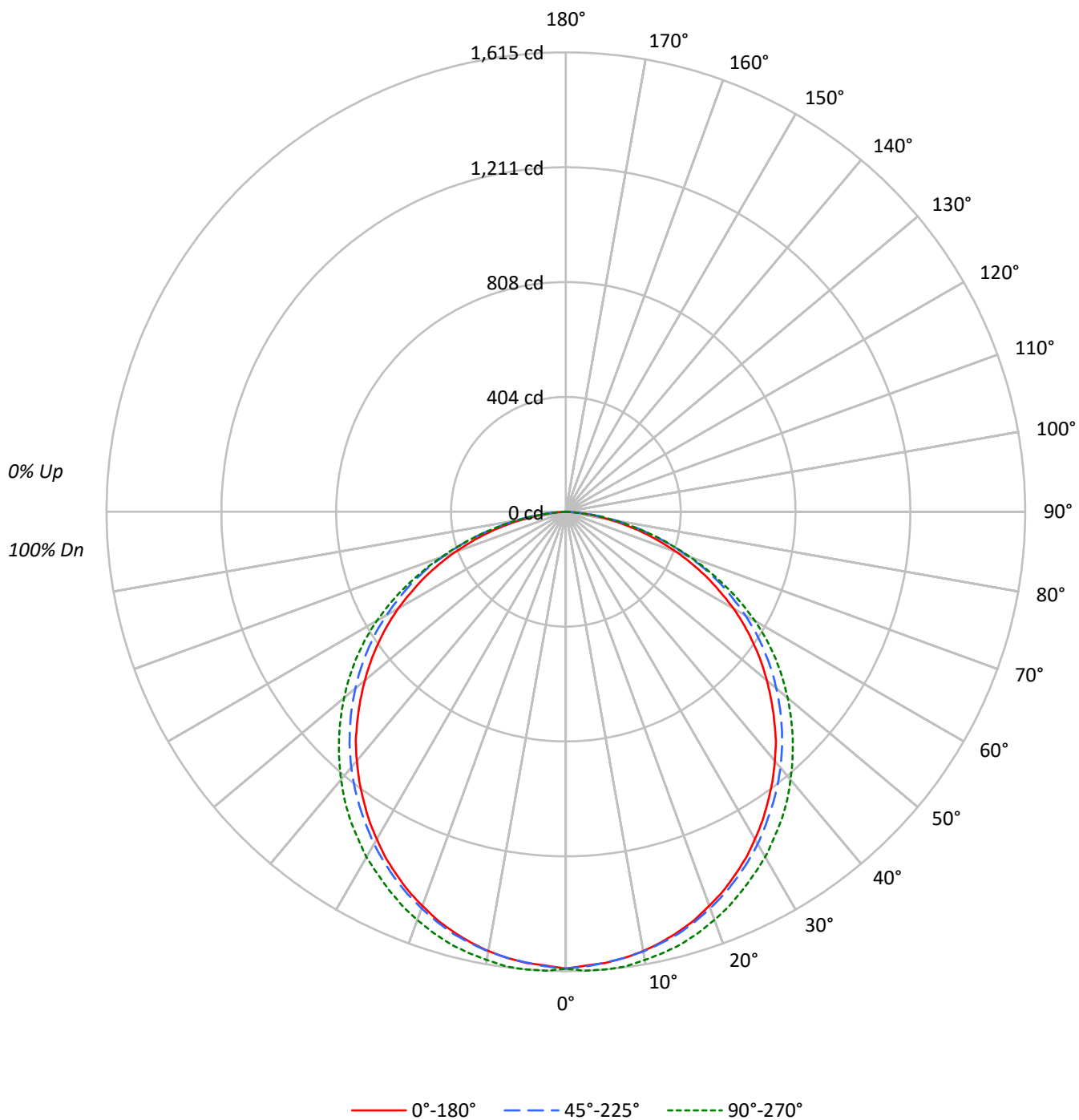
Lumens per Lamp: N/A
Luminaire Lumens: 4626.0 lumens
Efficiency: N/A
Efficacy: 139.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 33.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1584347

CATALOG NUMBER: 14CZSP-49HE-L940

Luminous Intensity Polar Plot



TEST NUMBER: P1584347

CATALOG NUMBER: 14CZSP-49HE-L940

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	94	97	94	91		94	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		62
5	76	63	54	47	73	61	53	47	59	52	46		57	51	46		55
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46
8	60	47	38	32	59	46	38	32	44	37	32		43	36	32		42
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5412	5412	5412
5°	5386	5381	5463
10°	5366	5371	5474
15°	5333	5354	5486
20°	5287	5320	5477
25°	5234	5285	5459
30°	5172	5248	5454
35°	5101	5200	5437
40°	5029	5162	5408
45°	4936	5117	5376
50°	4835	5065	5335
55°	4726	5002	5286
60°	4586	4912	5177
65°	4376	4786	4943
70°	4082	4514	4589
75°	3643	4075	4115
80°	2963	3433	3404
85°	1929	2397	1871

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5376 cd/sqm

TEST NUMBER: P1584347

CATALOG NUMBER: 14CZSP-49HE-L940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.1	3.3
10°-20°	435.8	9.4
20°-30°	660.1	14.3
30°-40°	797.4	17.2
40°-50°	833.0	18.0
50°-60°	762.8	16.5
60°-70°	586.1	12.7
70°-80°	326.3	7.1
80°-90°	72.3	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1248.1	27.0
0°-40°	2045.5	44.2
0°-60°	3641.3	78.7
0°-90°	4626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1606	1606	1606	1606	1606	
5°	1592	1609	1591	1600	1615	151
15°	1529	1544	1535	1550	1573	431
25°	1408	1424	1422	1443	1468	649
35°	1240	1258	1264	1294	1322	776
45°	1036	1058	1074	1105	1128	800
55°	804	830	851	882	900	719
65°	549	578	600	612	620	542
75°	280	308	313	313	316	296
85°	50	59	62	51	48	65
90°	0	0	0	0	0	

TEST NUMBER: P1584347

CATALOG NUMBER: 14CZSP-49HE-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1596.9	1612.0	1599.9	1604.5	1615.0
5°	1592.4	1609.0	1590.8	1599.9	1615.0
7.5°	1581.8	1596.9	1581.8	1592.4	1612.0
10°	1568.2	1584.8	1569.7	1580.3	1599.9
12.5°	1550.0	1563.6	1553.0	1568.2	1587.8
15°	1528.8	1544.0	1534.9	1550.0	1572.7
17.5°	1504.6	1518.3	1510.7	1530.4	1551.5
20°	1474.4	1489.5	1483.5	1503.1	1527.3
22.5°	1444.2	1459.3	1454.7	1474.4	1500.1
25°	1407.9	1424.5	1421.5	1442.6	1468.4
27.5°	1371.6	1388.2	1386.7	1410.9	1435.1
30°	1329.2	1345.9	1348.9	1374.6	1401.8
32.5°	1286.9	1305.0	1306.5	1335.3	1361.0
35°	1240.0	1258.2	1264.2	1294.4	1321.7
37.5°	1193.1	1211.3	1220.4	1249.1	1277.8
40°	1143.2	1162.9	1173.5	1203.7	1229.4
42.5°	1093.3	1113.0	1125.1	1155.3	1179.5
45°	1035.9	1058.5	1073.7	1105.4	1128.1
47.5°	979.9	1004.1	1020.7	1051.0	1073.7
50°	922.4	948.2	966.3	996.5	1017.7
52.5°	865.0	892.2	910.3	939.1	960.3
55°	804.5	830.2	851.4	881.6	899.8
57.5°	744.0	769.7	792.4	819.6	836.3
60°	680.5	707.7	728.9	756.1	768.2
62.5°	614.0	642.7	663.9	685.0	695.6
65°	548.9	577.7	600.3	612.4	620.0
67.5°	482.4	511.1	532.3	538.3	542.9
70°	414.3	443.1	458.2	461.2	465.8
72.5°	346.3	375.0	387.1	387.1	388.6
75°	279.8	308.5	313.0	313.0	316.1
77.5°	214.7	240.4	243.5	243.5	243.5
80°	152.7	172.4	176.9	176.9	175.4
82.5°	96.8	110.4	118.0	111.9	108.9
85°	49.9	59.0	62.0	51.4	48.4
87.5°	15.1	18.1	15.1	9.1	7.6
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1584347

CATALOG NUMBER: 14CZSP-49HE-L940

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.61	19.26	17.98	19.57	19.89	18.12	19.76	18.48	20.08	20.39
	3H	19.38	20.87	19.76	21.20	21.56	19.91	21.40	20.29	21.73	22.09
	4H	20.01	21.41	20.40	21.76	22.13	20.55	21.95	20.94	22.30	22.67
	6H	20.41	21.71	20.82	22.07	22.46	20.97	22.27	21.38	22.63	23.02
	8H	20.51	21.75	20.93	22.14	22.54	21.07	22.32	21.50	22.70	23.10
	12H	20.55	21.74	20.98	22.12	22.55	21.11	22.30	21.54	22.68	23.11
4H	2H	18.33	19.74	18.73	20.08	20.46	18.73	20.13	19.13	20.48	20.85
	3H	20.32	21.50	20.73	21.90	22.30	20.74	21.92	21.15	22.31	22.71
	4H	21.08	22.15	21.51	22.56	23.00	21.49	22.56	21.92	22.97	23.40
	6H	21.60	22.53	22.06	22.97	23.43	22.03	22.96	22.48	23.40	23.86
	8H	21.74	22.61	22.20	23.05	23.51	22.17	23.04	22.63	23.48	23.95
	12H	21.81	22.59	22.29	23.07	23.54	22.24	23.02	22.72	23.49	23.96
8H	4H	21.41	22.28	21.87	22.73	23.19	21.78	22.65	22.24	23.09	23.55
	6H	22.05	22.77	22.54	23.26	23.73	22.42	23.14	22.91	23.63	24.10
	8H	22.24	22.89	22.75	23.39	23.88	22.61	23.26	23.12	23.77	24.25
	12H	22.36	22.93	22.87	23.42	23.99	22.72	23.29	23.23	23.78	24.34
12H	4H	21.45	22.23	21.93	22.70	23.17	21.80	22.58	22.28	23.06	23.53
	6H	22.10	22.75	22.61	23.25	23.74	22.46	23.11	22.97	23.61	24.10
	8H	22.34	22.91	22.85	23.40	23.96	22.70	23.27	23.21	23.76	24.32